



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-------------|----------------------|-------------------------|------------------|--|
| 09/970,626 | 10/04/2001 | Steven P. Schwinke | GP-301613 | GP-301613 1389 | |
| 7590 07/07/2004 | | | EXAM | INER | |
| General Motors Corporation | | | PEREZ, J | PEREZ, JULIO R | |
| Legal Staff, Mail Code 482-C23-B21 300 Renaissance Center P.O. Box 300 Detroit, MI 48265-3000 | | | ART UNIT | PAPER NUMBER | |
| | | | 2681 | H | |
| | | | DATE MAILED: 07/07/2004 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|---|---|--|--|--|--|
| | Application No. | | | | |
| Office Action Comment | 09/970,626 | SCHWINKE, STEVEN P. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Julio R Perez | 2681 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 19 Ap | oril 2004. | | | | |
| | | | | | |
| • | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 11,12 and 26 is/are allowed. 6) ☐ Claim(s) 1-10,13-18,20-23,25,27,28 is/are rejected. 7) ☐ Claim(s) 19 and 24 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any accomplicated any objection to the Replacement drawing sheet(s) including the correct and the specific production is objected to by the Examine | epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal P 6) Other: | | | | |

Art Unit: 2681

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 and 13-28 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1,4-5, 13-14, 20-22, 25, 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Takayama (5442807).

Regarding claim 1, Takayama teaches a method of bypassing a blocked voice channel of a mobile phone system comprising: initiating a call request from a mobile phone (col. 1, lines 13-17; col. 3, lines 63-68; col. 4, lines 1-3, the mobile station request communication); scanning a plurality of control channels of a carrier (col. 1, lines 13-17; col. 4, lines 11-14, the mobile station performs channel scanning across the control channel bands); measuring a signal strength of each control channel (col. 1, lines 13-17; col. 4, lines 20-30; col. 8, lines 9-14, signal strength is measured on the control channels); requesting service access on a first control channel of the carrier based on the signal strength (col. 1, lines 19-22 and 62-68; col. 3, lines 63-68; col. 4, line 1, a connection request of an idle channel with highest signal strength is

Art Unit: 2681

requested); receiving a blocked signal indicating no availability of a voice channel on the first control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); selecting a second control channel of the carrier in response to the blocked signal, based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and requesting service access on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, therefore, requesting service).

Regarding claim 4, Takayama teaches the method further comprising: receiving a blocked signal indicating no availability of a voice channel on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); selecting a next strongest control channel of the carrier in response to the blocked signal based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and requesting service access on the next strongest control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, therefore, requesting service).

Regarding claim 5, Takayama teaches the method wherein the voice channel uses a service selected from a group consisting of voice telephony, short messaging, paging, voice mail, electronic mail, call forwarding, caller identification, call waiting,

Art Unit: 2681

conference calling, broadcast messages, voice band data, facsimile data, data transmission, modem access, direct access to computer networks, registration, authentication and access to emergency services (It is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that in any cellular or mobile systems is conventional for mobile stations to transmit information to base stations via the identified radio control channel, information communicated by the mobile and for the registration process include the Mobile Identification Number (MIN) and the Electronic Serial Number (ESN) of the mobile. This indeed comprises registration process. In terms of GSM, for instance, it is inherent for GSM systems to provide voice mail, short message service and facsimile service).

Regarding claim 13, Takayama teaches a computer usable medium including a program for bypassing a blocked voice channel of a mobile phone system, comprising (col. 5, lines 20-59, the system presented needs a program that can execute specified functions or steps in order to follow series of instructions): computer program code for initiating a call request from a mobile phone (col. 1, lines 13-17; col. 3, lines 63-68; col. 4, lines 1-3, the mobile station request communication); computer program code for scanning a plurality of control channels of a carrier (col. 1, lines 13-17; col. 4, lines 11-14, the mobile station performs channel scanning across the control channel bands); computer program code for measuring a signal strength of each control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); computer program code for requesting service access on a control channel of the carrier based on the signal strength (col. 1, lines 13-17; col. 4, lines 20-30; col. 8, lines 9-14, signal

Art Unit: 2681

strength is measured on the control channels); computer program code for receiving a blocked signal indicating no availability of a voice channel on the first control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); computer program code for selecting a second control channel of the carrier in response to the blocked signal, based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and computer program code for requesting service access on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, requesting service).

Regarding claim 14, Takayama teaches the computer usable medium (col. 5, lines 20-59, the system presented needs a program that can execute specified functions or steps in order to follow series of instructions), further comprising: computer program code for receiving a blocked signal indicating no availability of a voice channel on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); computer program code for selecting a next strongest control channel of the carrier in response to the blocked signal based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and computer program code for requesting service access on the next strongest control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, requesting service).

Art Unit: 2681

Regarding claim 20, Takayama teaches a blocked voice channel bypassing system comprising: means for initiating a call request from a mobile phone (col. 1, lines 13-17; col. 3, lines 63-68; col. 4, lines 1-3, the mobile station request communication); means for scanning a plurality of control channels of a carrier (col. 1, lines 13-17; col. 4, lines 11-14, the mobile station performs channel scanning across the control channel bands); means for measuring a signal strength of each control channel (col. 5, lines 8-11; col. 8, lines 9-14, signal strength is measured on each channel); means for requesting service access on a control channel of the carrier based on the signal strength (col. 1, lines 13-17; col. 4, lines 20-30; col. 8, lines 9-14, signal strength is measured on the control channels); means for receiving a blocked signal indicating no availability of a voice channel on the first control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when requested); means for selecting a second control channel of the first carrier in response to the blocked signal, based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and means for requesting service access on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, requesting service).

Regarding claim 21, Takayama teaches the system further comprising: means for receiving a blocked signal indicating no availability of a voice channel on the second control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile station is notified if a control channel is busy or available when

Art Unit: 2681

requested); means for selecting a next strongest control channel of the carrier in response to the blocked signal based on the signal strength (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, the mobile searches the next highest signal on the priority table to try to camp in); and means for requesting service access on the next strongest control channel of the carrier (col. 4, lines 10-14 and 45-68; col. 5, lines 1-4; Fig. 3 and 6, requesting service).

Regarding claim 22, Takayama teaches the system wherein the means for initiating a call request from a mobile phone includes an analog cellular phone system operating within a prescribed band between nominally 824.04 MHz and 893.97 MHz (col. 5, lines 33-42, AMPS consists of a total of 832 channels and occupies the band (MHz): 824 – 849 in the reverse band and 869 – 894 in the forward band).

Regarding claim 25, Takayama teaches the method, wherein the carrier is a home carrier (col. 4, lines 45-60, the controls channels are searched in the home cell site).

Regarding claim 27, Takayama teaches the computer reusable medium, wherein the carrier is a home carrier (col. 4, lines 45-60, the controls channels are searched in the home cell site).

Regarding claim 28, Takayama teaches the method, wherein the carrier is a home carrier (col. 4, lines 45-60, the controls channels are searched in the home cell site).

Art Unit: 2681

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) in view of Dent (6553229).

Regarding claim 2, Takayama teaches all the limitations in claim 1.

Takayama does not explicitly disclose wherein the mobile phone system is an analog cellular phone system.

However, However, the preceding limitation is well known in the art of telecommunications.

Dent teaches cellular radiotelephones, which are widely used in wireless communications (col. 5, lines 33-42, radiotelephones that include AMPS, an analog cellular system).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system as taught by Takayama with a system that includes analog because it would provide the system with more capability to encompass a wide variety of radiotelephone uses.

Regarding claim 3, Dent teaches the method wherein the analog, cellular-phone system operates within a prescribed band between nominally 824.04 MHz and 893.97

Page 8

Art Unit: 2681

MHz (col. 5, 33-42, AMPS inherently consists of a total of 832 channels and occupies the band (MHz): 824 – 849 on the reverse band and 869 – 894 on the forward band).

6. Claims 6-7, 15, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) in view of Raith et al. (6073005).

Regarding claims 6, 15, 23, Takayama teaches all limitations in claims 1, 13, 20. Takayama does not explicitly disclose increasing priority for emergency services. However, the preceding limitation is known in the art of mobile communications.

Raith et la. teach a mobile providing input for indication of an emergency call to be placed so that it can be categorized as emergency (col. 3, lines 65-67; col. 4, lines 1-3, 24-29; col. 5, lines 6-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the mobile communication system as taught by Takayama by implementing the mobile terminal with means to acquire possible emergency call numbers as taught by Raith et al. in order to increase the capabilities for emergency services.

Regarding claim 7, Raith et la. teach priority for emergency services by reducing wait time during the call request (col. 6, lines 64-67; col. 7, lines 1-10, a mobile, after the user has requested an emergency call, that takes a few seconds to set up the call to assign and connect to the system via a traffic channel).

7. Claims 8-10 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (5442807) and Raith et al. (6073005) in view of Dutta et al. (US20020137489).

Art Unit: 2681

Regarding claims 8,16, Takayama teaches all limitations in claims 1 and 13.

Takayama does not explicitly disclose the call request is automatically initiated in response to an emergency.

However, the preceding limitation is known in the art of mobile communications.

Raith et la. teach the mobile unit wherein a determination is taken after the user has provided input indicating an emergency call to be placed and be categorized as an emergency wherein appropriate action is to be taken (col. 3, lines 65-67; col. 4, lines 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the mobile communication system as taught by Takayama by implementing the mobile terminal with capabilities to respond to an emergency call in conjunction with mechanisms to provide geographical position of emergency calls as taught by Raith et al. in order to respond to such emergencies.

Regarding claims 9 and 17, Takayama and Raith et al. teach all limitations in claims 1 and 16.

Takayama and Raith et al. do not explicitly disclose the emergency indicated by the deployment of an air on a mobile vehicle carrying the mobile phone.

However, the preceding limitation is known in the art of mobile communications.

Dutta et al. teach a wireless phone equipped with an emergency notification system installed in a vehicle, which in an event of an emergency, the notification will be activated by the deployment of an air bag (Par. 0009; Par. 0040).

Art Unit: 2681

air bag deployment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the signal scanning system as taught by Takayama and Raith et al. by implementing the system with telecommunications circuitry operable to communicate on a wireless carrier system as taught by Dutta et al. because it would provide the system with capabilities to notify an emergency during an

Regarding claims 10 and 18, Raith et la. disclose the call request includes a geographical location of a mobile vehicle (col. 3, lines 65-67; col. 4, lines 1-3, includes mechanism for pinpointing position of an emergency caller).

Allowable Subject Matter

8. Claims 11, 12, 26 are allowed.

Prior art has not been found that suggests or renders obvious the limitation of independent claim 11 disclosing selecting a control channel on the carrier when the vehicle is within a predetermined speed range.

9. Claims 19 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Page 11

Page 12

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the art with respect to scanning cellular channels and methods for employing location information related to emergency calls.

US 20030211854 to Mazzara, JR. Activating a communication system in

mobile vehicles

US Pat. No. 6205334 to Dent

Accelerated scanning cellular channels

US 20020196161 to Gould et al. Methods for employing location

information

US Pat. No. 5572204 to Timm et al. Emergency message system

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on Monday - Friday, 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika Gary can be reached on (703) 308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2681

Page 13

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/25/04